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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 09/617,754 Confirmation No. : 8674
First Named Inventor : Klaus-Josef BENGLER
Filed : July 17, 2000
TC/A.U. : 2682
Examiner : T. Tran

Docket No. : 080437.48944US
Customer No. : 23911

Title : System in Vehicles for Making a Telephone Call

APPEAL BRIEF (AMENDED)

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This amended appeal brief is filed following receipt of the Notification of Non-Compliant Appeal Brief dated April 3, 2007. A more detailed mapping of the invention to independent claims 7 and 8 is provided. As this document is being filed within the one month/thirty day period set in the Notification referred to, no additional fee should be due.

I. REAL PARTY IN INTEREST

The real party in interest is Bayerische Motoren Werke Aktiengesellschaft, Petuelring 130, D-80788 Muenchen, Germany, as noted in an Assignment from the inventors to Bayerische Motoren Werke Aktiengesellschaft, dated January 8, 2000, and recorded in the U.S. Patent and Trademark Office at Reel 011355, Frame 0195.

II. RELATED APPEALS AND INTERFERENCES

Appellant is not aware of any appeals, interferences or other proceedings which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1-12 are pending and have been finally rejected. Appellant appeals the final rejection of claims 1-12, a copy of which are attached in the Claims Appendix.

IV. STATUS OF AMENDMENTS

No amendments have been filed subsequent to the final rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER

A concise explanation of the subject matter defined in the independent claims on appeal will now be provided. This explanation refers, by way of example only and without intending to limit the claims, to page and line numbers of the specification filed July 17, 2000, and to the drawings of this application.

Appellant's invention is directed to a method and system permitting a driver to add a visual transmission depicting the traffic situation surrounding the vehicle to a telephone call transmission. Telephone conversations in a vehicle considerably tie up the driver's attention, in part because the external

conversation partner does not know the actual traffic situation facing the driver, and thus cannot adapt his conversation accordingly. (pg. 1, lines 15-19). If the conversation took place within the vehicle, the other party would not ask the driver stressful questions, because he would understand the existing traffic situation. However, an external conversation partner is unaware of the existing traffic situation and frequently may ask stressful questions. (pg. 1, lines 19-24).

The claimed method and system of the Appellant's invention permits the driver to add a visual transmission of the traffic situation via video telephony to the telephone call connection, as a supplement to the voice conversation. If the external conversation partner has a video phone, the traffic situation is schematically transmitted to it. (pg. 2, lines 10-15). The image information that is sent to the external conversation partner, together with the voice conversation, is generated within the vehicle using an existing navigation system and vehicle sensors to form a schematic image of the surrounding environment and traffic situation. (pg. 2, line 19 to pg. 3, line 4).

Independent claim 1.

Claim 1 of the Appellant's invention recites a "method for communicating between a first party in a vehicle and a second party", including "initiating a telephone conversation between said first and second party", preparing a depiction and extracting from the depiction "relevant information concerning a traffic situation", and "transmitting said relevant information to said second external party together with audio information from said telephone conversation". By way of example, a visual map 18 (shown in Fig. 1) extracted

from information of the navigation system 10 and sensor system (ACC) 12 is sent through the transmission unit 30 to the second external party. (pg. 5, lines 13-21). The transmission unit 30 is synchronized to transmit both video information from the visual map 18 and audio information from the telephone conversation. (pg. 5, line 24 to pg. 6, line 5 and pg. 6 lines 8-11).

Independent claim 7.

Claim 7 of the invention recites an “arrangement for audio visual communication between a first party in a vehicle and a second external party”, which includes an on-board sensory system for providing information of an environment outside of said vehicle, extracting means for extracting portions of the information which are relevant to a traffic situation, and “an audio visual communication system for simultaneously transmitting a telephone conversation between said first and second party and said extracted relevant information to said second external party.” In one example, the ACC system 12 and sensors 10 provide the object information 14 relevant to the traffic situation. As shown in Fig. 2, the information is combined with data from the navigation system 20 to form a map 18 which includes the surrounding traffic, as shown in Fig. 1. (pg. 5, lines 13-19). The transmission unit 30 provides a synchronized channel to both the audio unit 28 and the video unit 16 for transmission to the second distant party. (pg. 6, lines 8-11).

Independent claim 8.

Claim 8 recites “an arrangement for communication between a first party in a vehicle and a second external party”, including an automobile navigation

system in the vehicle for providing information concerning traffic in an outside environment, and “a communication device for simultaneously transmitting telephone conversation between said first and second party and said relevant traffic information from said first party to said second party.” By way of example, the automobile navigation system 20 shown in Fig. 2 provides traffic information in the form of a map display 24 and audio messages 26, together with the object information 14 of the ACC system 12. (pg. 5, lines 13-18 and 21-23). The transmission unit 30 simultaneously transmits the telephone conversation and the relevant traffic information generated by the audio unit 28 and the video unit 16. (pg. 6, lines 8-11).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Are claims 1-12, which communicate between a first party in a vehicle and a second external party by initiating a telephone conversation between the first and second parties, by preparing a depiction of an environment surrounding the vehicle and extracting therefrom relevant information concerning a traffic situation, and by transmitting the relevant information to the second party together with audio information from the telephone conversation, rendered obvious under 35 U.S.C. §103(a) by U.S. Patent No. 6,405,132 (Breed et al.), which does not initiate any telephone conversations between parties and does not transmit any information together with audio information from the telephone conversation, in view of U.S. Patent No. 6,317,039 (Thomason), which does not prepare a depiction of an environment surrounding a vehicle from which

a telephone conversation is initiated and does not extract from the depiction relevant information concerning a traffic situation of the environment?

VII. ARGUMENT

The following points out the patentability of the pending claims.

Independent Claims 1, 7 and 8 are grouped together, along with dependent claims 2-6 and 9-12

Appellant reproduces below exemplary claim 1, in which the italicized portions are the main focus of the arguments on appeal.

1. A method for communicating between a first party in a vehicle and a second external party, comprising the steps of:

initiating a telephone conversation between said first and second party;
preparing a depiction of an environment surrounding said vehicle;
extracting, from said depiction, relevant information concerning a traffic situation in said environment;
transmitting said relevant information to said second external party
together with audio information from said telephone conversation.

The Examiner alleged in the final Office Action that Breed et al. discloses an arrangement for communicating between a first party in a vehicle and a second external party, the arrangement comprising on-board navigation and sensory systems for providing information concerning traffic in an environment outside of the vehicle, extracting means for extracting portions of the information which are relevant to a traffic situation in the environment outside

the vehicle, and communication system for transmitting the extracted relevant information from the first party to the second external party.

It is clear, however, that Breed et al. does not describe a method for communicating between a first party in a vehicle and a second external party, comprising extracting from a depiction of an environment surrounding the vehicle relevant information concerning a traffic situation, and transmitting the relevant information to the second external party together with audio information from a telephone conversation. Instead, Breed et al. concerns a system which prevents vehicle accidents by communicating the position of nearby vehicles to a host vehicle and determining whether any other vehicle represents a collision threat to the host vehicle, based on the position of other vehicles. A warning is then given to control the motion of the host vehicle. (Breed et al., Abstract).

The communication systems described by Breed et al. in Fig. 5 and in columns 70 and 74, is referred to by the Examiner on page 2 of the Office Action. The systems include an inter-vehicle communication subsystem 56 and an infrastructure communication subsystem 58. The inter-vehicle communication is limited to transmissions between nearby vehicles (Col. 70, lines 18-20), and only if the vehicles in question are equipped with the systems described by Breed et al. (Col. 66, lines 19-22). The communication between those vehicles is limited to only the location of the vehicles, GPS signals, road condition information, vehicle velocity and path, and information regarding the safety of the road system. (Col. 70, lines 31-36). The bidirectional communication

between the host vehicle and the infrastructure is limited to updates to the digital maps, whether information, road condition information, hazards, signs, congestion information and other information to improve the safety of the highway system. (Col. 70, lines 37-44).

Contrary to the Examiner's assertions, Breed et al. simply describes exchanging with nearby properly equipped vehicles position, speed and other parameters such that the processor of the host receiving vehicle is able to determine whether a collision threat exists (Col. 32, lines 21-28), and sending sufficient information to the infrastructure to receive updates to digital maps, weather and road conditions used by the host vehicle. (Col. 70, lines 37-44). This is not the same as transmitting to a second external party relevant information concerning a traffic situation, extracted from a direction of an environment surrounding the vehicle, as recited in claim 1.

The Examiner specifically asserted on page 2 of the Office Action that column 74, lines 56 to 61 of Breed et al. disclose a communication system as claimed. This assertion is plainly incorrect, because the relevant passage describes a control processor 100 that can be attached to a vehicle bus 110 for transferring information to and from the control processor 100 to other vehicle subsystems. This means that the information is passed to other subsystems of the same host vehicle, not to other vehicles apart from the host vehicle.

The Examiner correctly pointed out on pages 2 and 3 of the Office Action that Breed et al. does not mention a communication system for "simultaneously transmitting telephone conversation between the first and the second party and

the relevant traffic information from the first party to the second external party.” In an attempt to cure this deficiency, the Examiner cited Thomason as teaching those missing elements. The Examiner further asserted that it would have been obvious to apply Thomason’s teachings in modifying the arrangement disclosed by Breed et al. to allow the external party to monitor as well as to advise/control the first party, dependent upon the real time situation of the first party.

Thomason contemplates remote assistance and review of a technician or group of technicians at a remote job site by an advisor manning a local station. A wireless communication link is used between the remote site and the local station, including video and audio sensors. (Col. 1, lines 50-63). Using the wireless communication link, the advisor gives advice to the technician for manipulating or repairing remote apparatus. The environment of Thomason gives no indication that such a system is used in moving vehicles, nor to appraise one party to a traffic situation faced by the other party. If there is any contemplation of such use in a vehicle, it would be in the context of repairing it, which naturally would be performed in a stationary vehicle and would be irrelevant to Breed et al., which exchanges vehicle position and speed information to avoid accidents.

Clearly, the master technician or centralized expertise station of Thomason connected by a wireless network to one or more field technicians, as shown in Figs. 1 and 5, is completely irrelevant to the situation in Breed et al. The master technician receives the video and audio stimuli perceived by the field

technicians, and thus is able to provide advice on performing a repair or maintenance function. This is very different from the accident avoidance system of Breed et al., in which one or more central processors in a host vehicle exchange information with processors in other nearby vehicles and with an infrastructure.

The Appellant submits that Breed et al. teaches away from being combined with Thomason, contrary to the Examiner's assertions. The accident avoidance system described by Breed et al. involves communication between a host vehicle and nearby vehicles and with an infrastructure system that is automatic, transparent to any user and not being initiated or monitored by the user. Specifically, central processors and communication subsystems of one vehicle communicate with those of another vehicle and with the infrastructure system to automatically prevent an accident. The remote assistance system of Thomason, on the other hand, supplements communication between a master technician and field technicians with voice and video elements. This is very much a person to person (or persons) communication, with the addition of data and video exchanges, in which the users play a central role. One of ordinary skill in the art would not combine these references, because the automated communication environment of Breed et al. has nothing to do with the enhanced person to person environment of Thomason. Instead, Breed et al. would prompt further research of other automated communication systems, which would not lead to Thomason.

The Appellant also submits that the references cited by the Examiner cannot be combined to render the present invention obvious, because there is no motivation, teaching or suggestion that the references could be combined to meet the limitations recited in the independent claims 1, 7 and 8, each of which requires the transmission from a first party to a second party of telephone audio information together with relevant information concerning a traffic situation.

VIII. CONCLUSION

In view of the foregoing, Appellant submits that independent claims 1, 7 and 8 are patentable over Breed et al. in view of Thomason. Further, dependent claims 2-6 and 9-12 depend therefrom and are also submitted to be patentable. It is respectfully requested that the final rejection be reversed and the application allowed.

If there are any questions regarding this Appeal Brief or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

As noted above, no additional fee should be needed to effect proper filing of this amended appeal brief. If a fee is in fact due, however, please charge that fee or any deficiency in fees, or credit any overpayments, to Deposit Account No. 05-1323 (Docket #037068.55272US).

Respectfully submitted,

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CLAIMS APPENDIX

1. A method for communicating between a first party in a vehicle and a second external party, comprising the steps of:

initiating a telephone conversation between said first and second party;

preparing a depiction of an environment surrounding said vehicle;

extracting, from said depiction, relevant information concerning a traffic situation in said environment;

transmitting said relevant information to said second external party together with audio information from said telephone conversation.

2. The method according to claim 1, wherein said depiction is obtained by means of a preexisting navigation system on said vehicle.

3. The method according to Claim 1, wherein said depiction is obtained by means of a sensor system on said vehicle.

4. The method according to Claim 1, wherein said relevant information is updated periodically.

5. The method according to Claim 4, wherein said periodic update occurs in time increments of several seconds.

6. The method according to claim 1, wherein said step of preparing a depiction includes the step of preparing an image of said environment surrounding said vehicle.

7. An arrangement for audio visual communication between a first party in a vehicle and a second external party, said arrangement comprising:

on-board sensory system for providing information of an environment outside of said vehicle;

extracting means for extracting portions of said information which are relevant to a traffic situation in said environment outside of said vehicle;

audio visual communication system for simultaneously transmitting a telephone conversation between said first and second party and said extracted relevant information to said second external party.

8. An arrangement for communication between a first party in a vehicle and a second external party, said arrangement comprising:

an automobile navigation system in said vehicle for providing information concerning traffic in an environment outside of the vehicle;

a communication device for simultaneously transmitting telephone conversation between said first and second party and said relevant traffic information from said first party to said second party.

9. The arrangement according to claim 7, wherein said sensory system is an image acquisition system for providing an image of the environment outside of the vehicle.

10. The method according to claim 1 wherein the step of preparing a depiction of an environment surrounding said vehicle include the steps of obtaining object information from a sensing system and obtaining map display information from a map database.

11. The arrangement according to 7 wherein said extracting means for extracting portions of said information which are relevant to a traffic situation includes a means to provide map information concerning the location of said vehicle and means for combining portions of said map information with said information of said environment outside of said vehicle.

12. The arrangement according to claim 8 wherein said automobile navigation system includes a sensor means for providing object information and a navigation device for providing map display information.

EVIDENCE APPENDIX

None.

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RELATED PROCEEDINGS APPENDIX

None.